

REMARKS

The last Office Action of September 19, 2006 has been carefully considered. Reconsideration of the instant application in view of the foregoing amendments and the following remarks is respectfully requested.

Claims 1-10 are pending in the application. Claims 1, 2, 6, and 7 have been amended. Claims 5 and 10 have been canceled. Claims 11-18 have been added. Claims 1-4, 6-9, and 11-18 remain in the application. No fee is due.

Paragraph [0036] of the specification has been amended to conform the language, in particular with respect to the use of the term "telegram", to the corresponding paragraph of the German-language priority application on which the present application relies on. No new matter has been introduced.

Claims 1-10 stand rejected under 35 U.S.C. §112, first paragraph, as failing to comply with the enablement requirement.

Claims 1-10 stand rejected under 35 U.S.C. §112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 1-10 stand rejected under 35 U.S.C. §102(e) as being anticipated by US published Application No. 2003/0028765 to Cromer et al. ("Cromer").

CLAIM REJECTIONS — 35 U.S.C. §112, FIRST PARAGRAPH

Claims 1 and 6 have been amended to recite that data transmitted via the parallel bus and the serial bus are encoded by an identical data bus profile, identifying the format of the data.

Claims 2 and 7 have been amended to recite that the I/O units are connected for data transmission encoded by the identical data bus profile. One exemplary data bus profile is described in paragraph [0036] of the specification and illustrated in FIG. 7.

CLAIM REJECTIONS — 35 U.S.C. §112, SECOND PARAGRAPH

Claims 1 and 6 have been amended to clarify the relative positions of the internal and external drives.

The data bus profile has been discussed *supra*.

The trademarks have been deleted from claims 1 and 6. Claims 5 and 10 have been cancelled.

Withdrawal of the rejection of claims 1-4 and 6-9 under 35 U.S.C. §112, first and second paragraph, is thus respectfully requested.

CLAIM REJECTIONS — 35 U.S.C. §102

Claims 1 and 6, as amended herein, recites a data transmission system for a machine tool or production machine with a drive based-controller including a controller, at least one internal drive disposed inside the drive based-controller and controlling a first axle of the machine tool or production machine, at least one external drive disposed outside the drive based-controller and controlling a second axle of the machine tool or production machine, an internal parallel data bus connecting the controller with the internal drive, and an external serial data bus connecting the controller with the external drive. Data are transmitted via the parallel bus and the serial bus in form of a telegram (message) with an identical data bus profile describing operating parameters of the external drive and the internal drive, wherein the operating parameters are selected from the group consisting of actual position value of an axle, setpoint value of an axle, status of the drive, and status of a component of the drive.

Cromer discloses a computing system 40 with a microprocessor 42 connected to a system bus 44. Various other devices are connected to a peripheral component interconnect (PCI) bus 50 within the computing system 40. The PCI bus 50 is connected to the system bus 44 through a PCI host bridge 52. A universal serial bus (USB) device, such as compact disk (CD RW) drive 70, is

connected to the PCI bus 50 through a USB bridge 74.

The drives in the data transmission system of the present invention, as recited in amended claims 1 and 6, unlike the drives in Cromer's computing system 40, control first and second axes of a machine tool or production machine with data in form of a telegram (message) with an identical bus profile. The data transmitted between the controller and the drives describe operating parameters of the drive axes, wherein the operating parameters are selected from the group consisting of actual position value of an axle, setpoint value of an axle, status of the drive, and status of a component of the drive. Stated differently, Cromer does not teach or suggest controlling axes of a machine or transmitting operating parameters to/from the drives or drive axes.

Newly added claims 11 and 12, and 15 and 16, recite control modules and a converter modules connected to a corresponding motor that drives a corresponding axle of the machine tool or production machine. Newly added claims 13 and 14, and 17 and 18, recite transducers operatively connected to the corresponding drives and providing axle position values to the corresponding control module of the corresponding drive. Support for the newly added claims can be found in paragraphs [0005], [0006], and [0045] of the original specification.

Withdrawal of the rejection under 35 U.S.C. §102(e) and allowance of claims 1-4, 6-9 and 11-18 are thus respectfully requested.

CONCLUSION

Applicant believes that when reconsidering the claims in the light of the above comments, the Examiner will agree that the invention is in no way properly met or anticipated or even suggested by any of the references however they are considered.

In view of the above presented remarks and amendments, it is respectfully submitted that all claims on file should be considered patentably differentiated over the art and should be allowed.

Reconsideration and allowance of the present application are respectfully requested.

Should the Examiner consider necessary or desirable any formal changes anywhere in the specification, claims and/or drawing, then it is respectfully requested that such changes be made by Examiner's Amendment, if the Examiner feels this would facilitate passage of the case to issuance. If the Examiner feels that it might be helpful in advancing this case by calling the undersigned, applicant would greatly appreciate such a telephone interview.

Respectfully submitted,

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